

CLAIMS:

1. A method for scan-rate conversion of an image signal, comprising:
 - interpolating between at least a first image area of a first image of said image signal and a second image area of a second image of said image signal to obtain at least one interpolated image area;
 - 5 - extrapolating at least one image area of at least one image of said image signal to obtain at least one extrapolated image area: and
 - mixing said at least one interpolated image area and said at least one extrapolated image area to obtain a mixed image area.
- 10 2. The method according to claim 1, further comprising:
 - identifying occlusion areas in said images of said image signal.
- 15 3. The method according to claim 2, wherein said step of mixing is at least partially performed in dependence on a decision whether said image areas that are interpolated and/or extrapolated are occlusion areas.
4. The method according to any of the claims 1-3, further comprising:
 - determining at least one motion vector and at least one associated matching error for at least one image area of at least one image of said image signal.
- 20 5. The method according to claim 4, wherein said step of mixing is at least partially performed in dependence on said at least one determined matching error.
6. The method according to any of the claims 4-5, wherein said at least one matching error is determined according to a Sum of Absolute Differences (SAD) criterion.
- 25 7. The method according to any of the claims 4-6, wherein said at least one matching error is determined on the basis of pixels, lines, blocks or fields and in a predefined pattern for said at least one image area.

8. The method according to claim 5-7, wherein said at least one matching error, in dependence on which said step of mixing is performed, corresponds to an image area that is a non-occlusion area.

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9. The method according to claim 8, wherein said non-occlusion image area is selected in dependence on the difference between its corresponding motion vector and a desired motion vector.

10 10. The method according to claim 9, wherein said non-occlusion area is located in the vicinity of at least one occlusion area that is interpolated and/or extrapolated.

11. A computer program with instructions operable to cause a processor to perform the method steps of claims 1-10.

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12. A computer program product comprising a computer program with instructions operable to cause a processor to perform the method steps of claims 1-10.

13. A device for scan-rate conversion of an image signal, comprising:
20 - means for interpolating between at least a first image area of a first image of said image signal and a second image area of a second image of said image signal to obtain at least one interpolated image area;
- means for extrapolating at least one image area of at least one image of said image signal to obtain at least one extrapolated image area: and
25 - means for mixing said at least one interpolated image area and said at least one extrapolated image area to obtain a mixed image area.

14. The device according to claim 13, further comprising:

- means for identifying occlusion areas in said images of said image signal.

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15. The device according to any of the claims 13-14, further comprising:

- means for determining at least one motion vector and at least one associated matching error for at least one image area of at least one image of said image signal.